COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

GRACE ROBINSON HYDE
Chief Engineer and General Manager

October 19, 2016
File No. 31-320.10

Mr. Chris Marks
Denali Water Solutions
12812 Valley View St., #9
Garden Grove, CA 92845

Dear Mr. Marks:

Transmittal of LACSD JWPCP Biosolids Report

Attached please find the LACSD JWPCP, Biosolids Report for July 2016. The Report includes the following data for your files:

Biosolids
- total and soluble metals
- digester performance
- detected priority pollutants
- miscellaneous constituents

I certify, under penalty of law, that the Class B pathogen reduction requirements in 503.32(b)(3) and the vector attraction reduction requirements in 503.33(b)(1) have been met. These determinations have been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

I certify, under penalty of law, that the biosolids produced at JWPCP are non-hazardous in accordance with Title 22, California Code of Regulations (CCR), Division 4.5, Chapter 11, Article 3, Section 66261.24(a)(2)(A) Table II (Priority Pollutant Metals).

Attached are the analytical testing results for JWPCP in accordance with Title 22, California Code of Regulations (CCR), Division 4.5, Chapter 11, Article 3, Section 66261.24(a)(2)(A) Table II (Priority Pollutant Metals).

Should you have any further questions or require additional information, please contact Tom C. Fang at (562) 908-4288, extension 2825.

Very truly yours,

Melissa Fischer
Supervising Engineer
Monitoring Section

MF:TF:GS:nm
Attachments

#3668562

Notice and Necessary Information

To be Completed by Preparers of Class B Biosolids

Facility Name: Lancaster Water Reclamation Plant Monitoring Period: 07/01/2016 to 07/31/2016

1. Pollutant and Nitrogen concentrations (report results in mg/kg on a 100% dry weight basis. Attach lab analyses).

	As	Cd	Cu	Pb	Hg	Mo	Ni	Se	Zn	Org-N	NH_3-N	% solids
Result	9.73	3.1	476	9.33	0.69	16.1	27.3	6.7	1,490	53,000	5,420	21.3
Table 3	41	39	1,500	300	17	na	420	100	2,800	na	na	na
Table 1	75	85	4,300	840	57	75	420	100	7,500	na	na	na

Sampling date(s): 07/05/16 Sample Number(s): 16070600150

2. Class B Pathogen Reduction: (Check off and fill in applicable portion)

__√__ anaerobic for 46 days at 37.1 °C (99 °F) (range for past month)
Class B: either 15 days at 35°C to 55°C or 60 days at 20°C
___ aerobic digestion for ____to ____ days at _____to ____ degrees F / C (range for past month)
Class B: time (days) ≥ 20 - 15(temp, degrees C) for times between 40 and 60 days
___ drying beds for ____to_____ months (attach records of dates in and out)
Class B: time > 3 months; 2 months > 0 degrees C
___ fecal coliform: geometric mean of seven samples = _____ (attach lab results)
Class B: geometric mean of seven samples is < 2,000,000 mpn
___ lime stabilization: pH at 2 hours after addition = _____
Class B: pH 2 hours after addition of lime is ≥ 12

3. Vector Attraction Reduction:

__√__ Option 1: % VS_{in} = 89 % VS_{out} = 70 % VSR = 73 % per Van Kleeck method
VAR: VSR > 38%
____ Option 2/3: Bench scale test: % VSR = _____ after ____ days
VAR: additional VSR < 17% after 40 days (anaerobic), < 15% after 30 days (aerobic)
____ Option 4: SOUR = _____
VAR: SOUR < 1.5 mg O_2/hr/gram (dry weight)
____ Option 5: Composted _____ days at temps of _____ to _____degrees F/C (attach times/temps)
VAR: temp > 40 degrees C for 14 days, w/5 days > 45 degrees C
____ Option 6: time alkali added: _____ pH after 2 hours = ___ pH after 22 hours = ___
VAR: pH ≥ 12 for 2 hours after alkali addition, ≥ 11.5 for additional 22 hrs
____ Option 7: % solids = _____ Stabilization method: _____
VAR: stabilized solids > 75%
____ Option 8: % solids = _____
VAR: unstabilized solids > 90%
____ Option 9/10: Applier will inject/incorporate within _____ hours
VAR: injection within 1 hour, incorporation within 6 hours

Certification: I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Official Title: Melissa Fischer – Supervising Engineer

Phone: (562) 908-4288 Extension 2824 E-mail: mfischer@lacsd.org

Prepared By: G. Salva GS Reviewed By: M. Copeland MC T. Fang TCF

Signature: _____ Date: 19Oct16

July 2016 BIOSOLIDS ANALYSES
Lancaster Water Reclamation Plant
mg/kg Dry Weight (or as indicated)

Sample No.	Date	% TS	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn
16010600172	1/5/2016	19.2	11.3	2.6	81.6	449	9.93	1.0	13.1	26.1	8.3	1,090
16030200206	3/1/2016	19.5	10.1	2.5	79.6	400	14.5	0.95	14.8	27.4	9.8	1,040
16050400166	5/3/2016	24.5	9.4	2.6	67.5	388	10.2	0.70	18.1	25.4	7.4	1,030
16070600150	7/5/2016	21.3	9.73	3.1	77.0	476	9.33	0.69	16.1	27.3	6.7	1,490
MEAN		**21.1**	**10.1**	**2.7**	**76.4**	**428**	**11.0**	**0.84**	**15.5**	**26.6**	**8.0**	**1,160**
MAX			**11.3**	**3.1**	**81.6**	**476**	**14.5**	**1.0**	**18.1**	**27.4**	**9.8**	**1,490**
TABLE 1 LIMITS		****	**75**	**85**	****	**4,300**	**840**	**57**	**75**	**420**	**100**	**7,500**
TABLE 3 LIMITS		****	**41**	**39**	****	**1,500**	**300**	**17**	****	**420**	**100**	**2,800**

Sample No.	Date	Amm-N	Org-N	NO_3-N	NO_2-N	PO_4	K
16010600172	1/5/2016	6,250	52,800	< 10.4	2.92	90,100	1,800
16030200206	3/1/2016	7,900	54,400	12.1	5.64	92,400	1,690
16050400166	5/3/2016	6,190	44,400	< 8.17	1.41	88,700	1,790
16070600150	7/5/2016	5,420	53,000	< 9.39	5.21	77,900	1,530
MEAN		**6,440**	**51,200**	**12.1**	**3.80**	**87,300**	**1,700**
MAX		**7,900**	**54,400**	**12.1**	**5.64**	**92,400**	**1,800**

\ = No Limit
Statistics use detected values only.

July 2016 BIOSOLIDS MANAGEMENT PROGRAM

Lancaster WRP Digester Performance

Month	Temp (°F)	Detention Time (Days)	VSD (%)
January	99	56	65
February	99	53	72
March	99	59	71
April	99	44	71
May	99	42	71
June	99	44	73
July	99	46	73
MEAN	**99**	**49**	**71**
MIN	**99**	**42**	**65**

LANCASTER WATER RECLAMATION PLANT

2016 Digester Performance Summary

		HDT (days)	Temperature (degrees F)	VSD (%)			HDT (days)	Temperature (degrees F)	VSD (%)
Jan	Dig 4	62	99	62	Jul	Dig 4	51	99	72
	Dig 7	53	99	65		Dig 7	43	99	74
	Dig 8	52	99	67		Dig 8	43	99	73
	Avg	**56**	**99**	**65**		**Avg**	**46**	**99**	**73**
Feb	Dig 4	59	99	70	Aug	Dig 5			
	Dig 7	50	99	73		Dig 7			
	Dig 8	50	99	74		Dig 8			
	Avg	**53**	**99**	**72**		**Avg**			
Mar	Dig 4	66	99	68	Sep	Dig 4			
	Dig 7	56	99	73		Dig 7			
	Dig 8	56	99	72		Dig 8			
	Avg	**59**	**99**	**71**		**Avg**			
Apr	Dig 4	49	99	69	Oct	Dig 4			
	Dig 7	42	99	73		Dig 7			
	Dig 8	42	99	73		Dig 8			
	Avg	**44**	**99**	**71**		**Avg**			
May	Dig 4	47	99	69	Nov	Dig 4			
	Dig 7	40	99	72		Dig 7			
	Dig 8	40	99	71		Dig 8			
	Avg	**42**	**99**	**71**		**Avg**			
Jun	Dig 4	49	99	72	Dec	Dig 4			
	Dig 7	42	99	73		Dig 7			
	Dig 8	42	99	73		Dig 8			
	Avg	**44**	**99**	**73**		**Avg**			

HDT = Hydraulic Detention Time

VSD = Volatile Solids Destruction

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